

## REMARKS

Favorable reconsideration and allowance of the Claims of the present application are respectfully requested.

Claims 1-17 are pending in the present application. Claims 1-11, 13, 15 and 17 are examined on the merits. Claims 12, 14 and 16 have been withdrawn from consideration.

The Official Action has rejected Claims 1-11, 13, 15 and 17 under 35 U.S.C. §112, second paragraph, for failing to particularly point out and distinctly define the metes and bounds of the subject matter.

The Official Action has rejected Claims 1-11, 13, 15 and 17 under 35 U.S.C. §102(e) as allegedly anticipated by U.S. Patent 6,597,039 to Ohmi et al. (hereinafter, “Ohmi”).

Claims 1-4 have been amended to provide proper antecedent basis and to clarify the preamble. Support for these amendments can be found throughout the application, such as in FIG.

1. Claims 13, 15, 16 and 17 have been amended to provide proper antecedent basis.

Applicants respectfully submit new Claims 18-19 for examination. Claim 18 is directed to, *inter alia*, a material of the first porous layer being different from a material of the second porous layer. Claim 19 is directed to, *inter alia*, the first porous layer comprising a metal material, a metal oxide, a metal nitride, a metal carbide, or combinations thereof, and the second porous layer comprising a semiconductor material. No new matter has been added by way of the aforementioned Claim additions. For example, Applicant directs the Examiner’s attention to originally filed Claims 6 and 7, page 5 lines 9-18, and page 10 line 21 to page 11 line.

Applicants submit that the identified sections are presented only for the Examiner’s convenience and is not intended to be an exhaustive list of support.

In view of the following remarks, Applicants request further examination and reconsideration of the present patent application.

**Rejections under 35 U.S.C. §112**

The Official Action has rejected Claims 1-11, 13, 15 and 17 under 35 U.S.C. §112, second paragraph, for failing to particularly point out and distinctly define the metes and bounds of the subject matter. Independent Claims 1-4 have been amended to distinctly define the subject matter recited in the preamble of each claim.

Thus, the rejection of Claims 1-11, 13, 15 and 17 under 35 U.S.C. §112, second paragraph, is overcome. Withdrawal of the rejection and allowance of Claims 1-11, 13, 15 and 17 is earnestly solicited.

**Rejections under 35 U.S.C. §102**

Claims 1-11, 13, 15 and 17 stand rejected under 35 U.S.C. §102(e) as allegedly anticipated by Ohmi.

Ohmi does not anticipate or render obvious the claimed invention.

The invention, as recited in Claims 1-4 is characterized by an average opening diameter of pores in a first porous layer being smaller than an average diameter of pores in a second porous layer. Based on this claim recitation, it is possible to control the occurrence of the nuclei in the second porous layer by selectively controlling the occurrence of the crystal growth nuclei on the first porous layer, thereby suppressing the polycrystallization. Further, the claimed invention as recited in Claim 19 makes it possible to further suppress the polycrystallization since the affinity of each layer for growing crystal is different from the others.

The Official Action alleges that Ohmi discloses in FIG. 8 and column 13 lines 52-65 that the average opening diameter of pores in a porous layer 22 is smaller than the average diameter

of pores in a porous layer 23. However, this is not what Ohmi discloses. Ohmi merely discloses that the separation area has a lamination structure of the first layer (23 of FIG. 8 of Ohmi) which is small in porosity and that the second layer (22 of FIG. 8 of Ohmi) has a larger porosity. See column 13 lines 59-62 of Omi. As used in Ohmi, the term “porosity” means a porous level, namely the number of pores or holes per unit of area. Therefore, the “porosity” of Ohmi does not relate to the average opening diameter of the pores in the porous layer of the claimed invention.

Thus, Ohmi fails to disclose, teach or suggest an average opening diameter of pores in a first porous layer being smaller than an average diameter of pores in a second porous layer, as recited in Claims 1-4 and all claims depending therefrom of the present application. Since Ohmi does not disclose, teach or suggest every feature of the claimed invention, it is not an anticipatory reference. Therefore, the rejection of Claims 1-11, 13, 15 and 17 under 35 U.S.C. §102(e) is overcome. Withdrawal of the rejection and allowance of Claims 1-11, 13, 15 and 17 is earnestly solicited.

Further, new Claims 18 and 19 are not anticipated and not obvious in view of the Ohmi disclosure. Ohmi discloses that the first layer (23 of FIG. 8 of Ohmi) is first formed by anodization, therefore the anodization current is increased to similarly form the second layer (22 of FIG. 8 of Ohmi) to be larger in porosity. See column 13 lines 61-63 of Ohmi. The first layer (23 of FIG. 8 of Ohmi) and the second layer (22 of FIG. 8 of Ohmi) are formed of the same material, which is in contrast to new claims 18 and 19 which recite that the first porous layer and second porous layer are of different materials.

In view of the above, it is respectfully submitted that this application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued.

Respectfully submitted,  
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